



University of Connecticut
OpenCommons@UConn

Master's Theses

University of Connecticut Graduate School

5-7-2016

Physicians' Perceived Roles in and Barriers to Identifying, Evaluating, and Managing Intimate Partner Violence

Adam F. Pennarola

University of Connecticut School of Medicine and Dentistry, apennarola@uchc.edu

Recommended Citation

Pennarola, Adam F., "Physicians' Perceived Roles in and Barriers to Identifying, Evaluating, and Managing Intimate Partner Violence" (2016). *Master's Theses*. 904.
https://opencommons.uconn.edu/gs_theses/904

This work is brought to you for free and open access by the University of Connecticut Graduate School at OpenCommons@UConn. It has been accepted for inclusion in Master's Theses by an authorized administrator of OpenCommons@UConn. For more information, please contact opencommons@uconn.edu.

Physicians' Perceived Roles in and Barriers to Identifying, Evaluating, and Managing
Intimate Partner Violence

Adam Francis Pennarola

B.S., University of Connecticut, 2008

A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Public Health

At the

University of Connecticut

2016

APPROVAL PAGE

Masters of Public Health Thesis

Physicians' Perceived Roles in and Barriers to Identifying, Evaluating, and Managing
Intimate Partner Violence

Presented by

Adam Francis Pennarola, B.S.

Major Advisor _____
Jane Ungemack, Dr.P.H

Associate Advisor _____
Garry Lapidus, PA-C, MPH

Associate Advisor _____
David Gregorio, Ph.D., M.S.

University of Connecticut

2016

Acknowledgements

I was able to complete this thesis only with the guidance and support of several remarkable individuals. Dr. Jane Ungemack and Garry Lapidus were instrumental in bringing this project to fruition and provided me with invaluable advice and direction throughout the process. I cannot thank them enough. I was also grateful for the input of Dr. David Gregorio, Judy Lewis, and Dr. Stephen Schensul as I contemplated the exact nature of the research I would complete for my degree. Their patience and understanding was much appreciated. I am forever grateful for the support of my family, friends, and my mentors in medicine and public health; without them I could never have accomplished this work. To all of those I mentioned above, thank you for helping start me down a path toward what I hope will be a fruitful career in medicine and public health.

Table of Contents

Introduction.....	1
Methods.....	15
Results.....	17
Summary and Discussion.....	33
Appendices.....	42
References.....	50

Introduction

Intimate partner violence (IPV) affects millions of men and women annually in the United States^{1, 2}, and represents a significant source of morbidity and mortality³⁻⁵. There are slight variations between definitions of IPV in the literature, though the definition provided by the Centers for Disease Control and Prevention (CDC) is often cited and includes a variety of types of behavior that qualify as intimate partner violence. The definition of IPV as provided by the CDC is as follows: “Intimate partner violence includes physical violence, sexual violence, stalking and psychological aggression (including coercive tactics) by a current or former intimate partner (i.e., spouse, boyfriend/girlfriend, dating partner, or ongoing sexual partner)”². Physicians are in an ideal position to identify IPV, as they regularly care for patients who are victims of trauma and often engage in sensitive conversations with their patients regarding their social situations. Research which has examined physician attitudes demonstrates that physicians frequently believe that they have a role to play in screening for IPV in their patients and conducting brief assessments and referral to IPV services, though many barriers exist which prevent them from adequately addressing this problem. To date, there has not been a study of US primary care physicians’ attitudes and beliefs towards discovering, evaluating, and managing IPV in their patients. This study serves to examine physicians’ perceived roles in and barriers to managing IPV in the primary care setting.

Background

Intimate partner violence has long been acknowledged as a medical and public health problem with documented serious implications for the health of victims and families^{1, 6-7}. It is estimated that 1.5 million women in the United States experience physical and/or sexual violence by an intimate partner each year^{1, 4, 8-10}, which is an estimate derived from the 1995-96 National Violence Against Women (NVAW) survey⁴⁵. However, more recent data from the National Intimate Partner and Sexual Violence Survey (NISVS) indicate that nearly 10 million women and men per year are victims of physical violence by a current or former intimate partner². Lifetime rates of IPV against women are between 25-31%¹, and one in 11 women in the US (8.8%) have been raped over their lifetimes by a current or former intimate partner². Physical violence occurs in up to 6 million intimate partner relationships per year¹¹, and IPV is almost always a feature of active, past, or thwarted sexual relationships¹². Despite the fact that women are nearly universally at greater risk of physical and sexual violence from current or former intimate partners than from other sources¹³, women are more often afraid of violence from strangers¹⁴. In studies of female homicide victims, anywhere from 30-60% of women who are murdered are killed by current or former intimate partners^{1, 8, 15-16}, and in many of these situations the woman was physically abused prior to her death¹⁶. For young African-American women (ages 15-34 years), murder by an intimate partner is the leading cause of death in the US⁸. IPV is estimated to cause nearly 2 million injuries and 1300 deaths annually¹⁷.

Just as the definition of IPV is broad and includes different types of behavior, the consequences of experiencing IPV are varied for victims. Victims of IPV are at greater

risk for a number of physical health ailments including gastrointestinal disorders and gynecological conditions, mental health ailments including depression and suicidal ideation, and increased substance use^{1, 3-5, 16, 18}. Increased rates of gynecological conditions represent the most readily identified distinction in health status between abused and non-abused women, with sexually transmitted infections, vaginal bleeding, chronic pelvic pain, and urinary tract infections occurring much more frequently in abused women¹⁵. Women who experience IPV are at greater risk for depression and post-traumatic stress disorder (PTSD) than women who have histories of childhood sexual abuse¹⁵. Victims of IPV incur 2-2.5 times the health care costs of non-victims¹. It is estimated that the annual economic impact of IPV is \$4.1 billion in direct medical costs with an additional \$1.8 billion in related costs¹⁷.

Data show that women are disproportionately represented as victims of IPV with men as perpetrators¹¹, though approximately 800,000 men annually and 14% of men over their lifetimes experience IPV^{2, 8}. Both males and females are vulnerable to different types of IPV, though females are at greater risk for physical assault and sexual coercion^{19, 20}, with males reporting higher rates of psychological abuse alone²⁰. Psychological abuse may account for nearly half of IPV among women and 78% of IPV among men, with 14% of women and 18% of men having experienced psychological abuse alone over their lifetimes²⁰. Additionally, female victims of IPV report that they are fearful of their partners at much higher rates than male victims (28.8% of female vs. 5.2% of male victims), and are over three times more likely to be injured by an intimate partner¹⁹. Furthermore, women are at much greater risk for experiencing lethal abuse by men than men are by women²¹.

While IPV has known adverse effects for victims themselves, there are often other parties which may be negatively impacted by IPV. Children have often been treated as tangential to violence between intimate partners²¹, but children of abused women are often aware of ongoing abuse more than their parents acknowledge¹⁶. Children exposed to abuse of their mothers demonstrate higher levels of anxiety, aggressive behaviors, social withdrawal, hyperactivity, physical symptoms (including bed wetting and disturbed sleep), and suicidal ideation¹⁶. Children raised in the presence of IPV may experience disorganized attachment to their mothers, and may actually carry out their own physical aggression towards their mothers²¹. The presence of IPV also increases the risk of direct physical and sexual abuse of children, with 45-70% overlap demonstrated between domestic violence and physical child abuse²¹. IPV also contributes to low infant birthweights in abused pregnant women^{15, 16}, with IPV occurring in anywhere from 3-13% of pregnancies worldwide¹⁵.

Despite that IPV is highly prevalent across a diverse population, certain individual characteristics are associated with additional risk for experiencing IPV²². Increased education and socioeconomic status are associated with decreased prevalence of IPV in women when compared to women with lower socioeconomic status¹⁵. Poverty is thought to contribute to IPV in a number of ways, including by reducing the available avenues through which poor males are able to cope with stress¹². This relationship is complicated, however, and appears to be somewhat modulated by structures of primary economic support within households; working women with unemployed partners are at greater risk for IPV, whereas situations where a woman and her partner are supported by a third party show decreased rates of IPV¹². Other characteristics of intimate

relationships, such as frequency of verbal disagreements or other conflicts, are also associated with an increase in physical violence¹². Increased rates of IPV are seen in situations where IPV is seen as a social norm: boys whose mothers were abused are more likely to abuse their partners as adults, and girls whose mothers were abused are more likely to be abused themselves as adults¹². The prevalence of IPV in rural communities may be even greater than in non-rural communities, affected by factors such as social/geographical isolation, limited access to healthcare services and resources, and poverty⁵. However, other research has demonstrated no significant correlation between risk and urban vs. rural populations¹². Several other personal characteristics have been associated with increased likelihood of perpetrating IPV, including criminal history, history of substance use, unemployment, and being a former partner of the victim¹⁵. While young males are more likely to perpetrate IPV than older males¹¹, age, race, and alcohol use of female victims have not been demonstrated to have a significant effect on rates of IPV¹¹. However, since young females may be involved in intimate partner relationships with young males at disproportionate rates compared to older women, it may be that young age represents an indirect risk factor for experiencing IPV in women¹¹. Termination of relationships does not necessarily lead to a cessation of IPV, and is actually associated with an increase in severity of IPV²¹. One study documented that half of women murdered by their partners were killed after the termination of a relationship¹⁰.

Despite increasing recognition of IPV as a medical and public health problem, rates of screening and assessment for IPV by healthcare providers are routinely low^{6-7, 17, 23}. Estimates of screening rates of women in primary care settings are 5-10%, while

rates are estimated to be 5-25% in emergency room settings⁷. Mental health professionals document IPV in case notes at a rate of 10-30%²⁴. Actual rates of IPV in women seeking care in primary care settings are estimated to be 15%, suggesting that primary care practitioners regularly treat victims of IPV regardless of whether or not they are aware of it²⁵. Furthermore, 25-37% of patients presenting to primary care practices have experienced IPV in their lifetimes¹⁷.

Roles of Physicians in Addressing IPV

There are many societies and professional organizations for physicians that provide guidelines for when and how patients should be screened for exposure to IPV in the healthcare setting. For example, the United States Preventive Services Task Force (USPSTF) recommends that women of childbearing age should be screened for IPV²⁶, whereas the Institute of Medicine (IOM) recommends that screening for all women and adolescent girls should be provided at their physician's office²⁷. The American Academy of Family Physicians (AAFP) recommends that physicians should discuss IPV with their patients in a non-judgmental manner²⁸. The Liaison Committee on Medical Education (LCME) states that medical schools must prepare their students to treat their patients for exposure to violence and abuse²⁹. Additionally, the Joint Commission on Accreditation of Healthcare Organizations has mandated that clinics and hospitals must provide interventions on behalf of identified victims of IPV³⁰.

Studies which have investigated the perspectives of patients and victims suggest that these populations feel that physicians have a variety of roles relating to IPV exposure^{1, 30}. Female patients (both with and without history of IPV exposure) largely

believe that physicians have a role in screening for IPV²⁵. Female victims also feel that physicians should provide support or access to resources rather than merely identifying IPV¹. Female survivors of IPV emphasize the importance of establishing a non-judgmental and safe environment in which to discuss IPV, and also generally state that physicians should provide patients with information and resources for IPV exposure regardless of whether or not their patients disclose a history of IPV^{1, 30}. According to a study by Chang et al.³⁰, patients expect to be offered both emotional and practical support with regards to identified IPV exposure. They feel that establishing an open line of communication between patient and physician is an important role for physicians in managing IPV exposure. Female patients expect that physicians will have respect for patient autonomy and present multiple options for moving forward when a history of IPV exposure has been discovered³⁰. In addition, patients stress the importance of safety planning and following up with their physicians in the management of IPV exposure³⁰. Informational interventions, such as providing flyers with hotline numbers or providing information about legal steps that may be taken by victims are generally viewed as helpful by victims of IPV³⁰. Conversely, interventions that may make patients feel less safe or are damaging to patient autonomy include regular phone call check-ups from physicians' offices, someone from the physician's office calling the police, or advising victims to stay at a shelter³⁰.

Primary care physicians, having built strong and trusting relationships with their patients, are well positioned to investigate and evaluate complex and/or sensitive social issues with their patients³. However, when interviewed about their own capacities regarding identifying, evaluating, and managing exposure to IPV, physicians may be

unsure of exactly what their roles entail³, though it appears that physicians largely believe they have at least some role in identifying IPV in their patients^{6, 25}.

Barriers to Addressing IPV

A number of studies have attempted to identify the barriers to physicians identifying, evaluating, and managing IPV in their patient populations^{6-7, 23, 31}. Such studies have revealed a variety of barriers to physicians acting effectively in the roles that they, their patients, and several national organizations believe they should have. These barriers include physician-related barriers, patient-related barriers, intimate partner-related barriers, situational barriers, and resource-related barriers. These categories of barriers frequently emerge throughout the literature, and reflect the near-universal prevalence of such factors which hinder physicians from performing their jobs and patients from being adequately served⁶.

Physicians themselves, through a combination of factors, often feel that they are inadequately prepared to address IPV^{7, 25}. Providers frequently lack confidence in their abilities to identify and manage patients with a history of IPV^{23, 31}. Inefficient provider education is also frequently cited as a barrier to screening for IPV^{4, 23, 32}, though paradoxically training programs are often poorly attended and it remains unclear as to the impact of training programs on IPV screening rates³². One commonly discovered barrier is that physicians may believe that there are no effective interventions for addressing IPV in their patients. Studies show that this belief may prevent them from attempting to identify or evaluate IPV^{17, 25, 32}. Nyame et al.²⁴ demonstrated that 60% of mental health professionals surveyed were unfamiliar with available support services for

victims of IPV; lack of knowledge of resources constitutes an additional barrier to effectively managing IPV. While age of physicians has not been demonstrated to have significant impact on physician attitudes toward assisting IPV victims, one study demonstrated that white and married physicians are more likely to have negative feelings towards working with victims of IPV³³. The impact of physician gender is unclear with regards to attitudes/beliefs/behaviors regarding IPV. One study found no significant effect of physicians' gender³³, while research has found that male physicians perceive barriers to addressing IPV more frequently than female physicians¹⁷. Additionally, physicians in private practice settings identify barriers to managing IPV more frequently when compared to physicians working in other settings such as hospitals or public clinics¹⁷. Overall, though many physicians do report that addressing IPV is a medical issue^{6, 25}, interview data has demonstrated that some physicians believe that IPV is not within their purview to address in the medical context^{6, 34}.

Certain behaviors or attitudes of patients have been identified by healthcare professionals as barriers to physicians' adequately addressing IPV. Patients may be reluctant to disclose a history of IPV¹, and physicians frequently identify this reluctance as a barrier to effectively addressing IPV^{6, 7}. Patients with a history of disclosure of IPV without effective evaluation or management by a physician may be reticent to disclose any further IPV in the future³⁵. Previous studies reveal that some physicians believe that patients do not want to be asked about IPV at their medical appointments, and they are concerned that evaluating their patients for IPV will offend them^{17, 23, 36}. Characteristics of patients such as lower education and being economically dependent on an abusive

partner have been associated with reluctance to disclose IPV for female victims⁵. These factors may be more significant for women in rural settings ⁵.

Barriers to addressing IPV have been found to be associated with the perpetrators of IPV. Physicians may endorse feelings of apprehension or fear regarding their being targeted for aggression or retribution by perpetrators of IPV if they engage in discussions with victims of IPV^{6, 22}. This may be particularly true if physicians become aware of a criminal history associated with a perpetrator of IPV⁶. If physicians are responsible for providing care to both victims and perpetrators of IPV, they may experience difficulty maintaining professional relationships with both parties if IPV is addressed⁶.

Situational or structural factors routinely impact the ability of physicians to effectively manage IPV. Lack of time to adequately address IPV during medical appointments is cited commonly as a factor which limits the ability of physicians to adequately identify, evaluate, and manage IPV in their patients^{4, 6, 22, 32, 37, 38}, just as it is frequently cited as a factor which prevents physicians from addressing other preventive health care measures, such as smoking cessation or cholesterol screening⁹. Physicians may be reluctant to discuss IPV with their patients when other family members (such as children or intimate partners) are present in the room, suggesting that lack of privacy in exam rooms may constitute a barrier to asking about IPV³⁹. It has also been occasionally documented in the literature that physicians may fear legal complications regarding the discovery of IPV in their patients and so may refrain from asking about it^{7, 23}. Lack of specialized staff support, such as social workers, may negatively impact physicians' ability to adequately address IPV⁴⁰.

Decreased availability of relevant community resources may influence physicians' attitudes and behaviors towards addressing IPV. Health care providers may feel that their workplaces do not have sufficient access to community referral resources for IPV²⁴. Additionally, physicians may practice in communities where access to specialty management services for IPV are limited, such as rural or impoverished areas⁵. Physicians caring for specific populations, such as the elderly, may be frustrated by lack of community resources to address IPV in this population⁴¹.

Current Research on Physicians' Attitudes and Practices in Addressing IPV

Previous research in this area has elucidated many of the features of the attitudes, beliefs, and practices of physicians regarding identifying, evaluating, and managing IPV in their patients. Research has also provided some insight as to the variety and relative effectiveness of different interventions intended to increase physicians' abilities to address IPV.

Physician attitudes and beliefs towards addressing IPV have been examined previously in the literature. Studies which examine physician attitudes and beliefs frequently make use of survey instruments or interviewing techniques, either in focus groups or individual interviews. Interviews with physicians in focus groups have provided insight as to some of the attitudes which health care providers have towards IPV^{6, 25}. In describing the experience of working with patients who experience IPV, health care providers reflect on the experience as a difficult journey into the unknown, opening a "can of worms" or "Pandora's Box"^{25, 41}. Physicians perceive causes of IPV to be related to cultural factors, inequality between genders, attitudes and behaviors of

(predominantly female) victims, and perpetrators' childhood experience⁶. Regarding certain attitudes towards the factors which contribute to IPV in their patient populations, attitudes among physicians may differ by gender⁶. Male physicians are more likely to regard denial of sex by a female partner as a contributing cause of male partner aggression, are more likely to believe that female victims will enter into abusive relationships serially, and are less likely to conceptualize how children may be influenced by the presence of IPV in the home⁶. Female physicians, on the other hand, have been found to be more likely to support female partner's rights to self-determination in sexual relationships, more likely to view female separation from abusive partners as a gradual process, and more likely to consider how children may be effected by IPV⁶. Perhaps unsurprisingly, when physicians are asked about factors which prevent them from adequately addressing IPV in their patient populations, they more frequently cite patient factors rather than physician factors contributing to inadequate detection and intervention⁴².

Physicians' practices in addressing IPV have also been studied. Many studies have examined the effectiveness of a variety of screening approaches, looking at differences in outcomes between routine vs. indicated screening and physician vs. self-administered screening tools. Physicians who engage in indicated screening for IPV have pointed to physical trauma, somatic symptoms, and mental illness as presenting complaints which most frequently trigger their screening for IPV⁵. However, use of routine (i.e., non-elective) screening for IPV has been shown to increase identification rates of IPV⁴. Evidence also suggests that self-administered IPV screening, particularly

with the use of computer-assisted screening tools, are at least as effective as provider-administered screening tools for identifying IPV³⁷.

Studies which have sought to determine the effectiveness of a variety of interventions on influencing behaviors of physicians toward addressing IPV have had mixed results. Educational interventions, in which physicians or healthcare providers undergo some degree of formal training regarding IPV identification, evaluation, and/or management have not been shown to produce significant lasting changes provider behaviors^{4, 9}. When educational strategies are combined with other approaches, however, such as use of routine screening questionnaires, it may be possible to improve identification rates of IPV⁴, although whether routine identification necessarily translates into routine evaluation and development of management plan for IPV is less clear²². Combinations of instructional approaches and immersive training experiences - such as visits to safe shelters to speak to victims of IPV - have shown to have a modest effect on physician knowledge of IPV²³. Approaches which confront barriers to addressing IPV using systemic-level interventions appear to be successful in increasing physicians' identification and management of IPV³². Systems approaches to addressing IPV management may include: institutional support, educational interventions for providers, refresher training, implementation of screening protocols, environmental prompts like exam room posters, and specialized evaluators trained to address domestic violence^{9, 32, 39, 43, 44}.

While survey studies have been designed to assess physicians' beliefs toward screening for IPV^{17, 42}, no study was identified which examined US primary care physicians' attitudes and behaviors towards both screening and managing IPV.

Identifying physicians' perceived roles in and barriers to managing IPV represents a valuable component of understanding the dynamics surrounding this issue. The purpose of this study is to determine what Connecticut primary care physicians' attitudes, beliefs, and practices are related to identifying, evaluating, and managing IPV in their patients.

Methods

The target population for this study was self-identifying primary care physicians practicing in Connecticut. Data were collected directly from participants via an anonymous, self-administered, web-based survey. Development of the survey used in this study was informed by tools identified in the literature to assess physician beliefs and attitudes concerning IPV^{6, 31}. The survey instrument consisted of 19 questions using multiple formats (including multiple choice, Likert-type questions, and open-ended questions). The survey collected information about physician's attitudes and beliefs regarding IPV, including identifying what constitutes IPV, what the rates of IPV are in their patients, and how comfortable they are with screening for IPV. Additionally, the survey asked about any formal training in IPV screening/management, physicians' perceived roles in identifying, evaluating, and managing IPV in their patients, as well as barriers toward acting in those roles. The survey questionnaire is attached to this report as an addendum.

The electronic survey was distributed to physicians belonging to any of three fields of medical practice: internal medicine, family medicine, and obstetrics/gynecology affiliated with the University of Connecticut Health Center (UCHC). Complete email lists of UCHC faculty employed in these fields were obtained from individual departments at the health center. Excluded from this study were non-physician practitioners and physicians practicing in other states. Distribution of the survey was targeted toward primary care practitioners, though the survey was sent to some specialists who had been included in the complete lists of department faculty. This was done to both

maximize survey participation and because some medical specialists do practice primary care for certain patient populations (i.e. infectious disease physicians may provide primary care to HIV patients).

Subjects were recruited via email to explain the study and to provide a link to the electronic survey. Participants were instructed that the survey was intended to be completed by physicians practicing primary care. The survey was sent to 252 physicians including 124 internists, 119 family physicians and 9 obstetrician/gynecologists. Physicians received the electronic survey via their email accounts and completed it voluntarily if they chose to participate in the study. The survey was administered to participants over a period of 6 weeks from February 2016 through March 2016.

Data were exported in to Microsoft Excel and organized into tabular form. Where applicable, univariate descriptive statistics were calculated including measures of central tendency. Data were used to generate frequency distributions relating to physicians' perceived roles and barriers to addressing IPV. Results of the analysis are reported below.

Results

Demographics

The survey was completed by 56 physicians, providing an overall response rate of 22%. A summary of participants' characteristics are displayed in Table 1. The pool of respondents consisted of 34 females (61%) and 22 males (39%); the age range approximated a normal distribution with the median age located in the 45-54 range. The survey was largely completed by physicians practicing in internal medicine (44.6%) and family medicine (41.1%), though respondents also included two physicians practicing in obstetrics/gynecology, one pediatrician and five physicians who practiced in another field of medicine. Physicians who responded to the survey demonstrated a wide range of years in practice in their designated field (see Table 1). The largest group of physicians reported that they cared for 21-40 patients per week (33.9%); 19.6% stated that they cared for 0-20 patients per week while 7.1% stated that they cared for over 100 patients per week. Finally, 23.2% of respondents characterized their practice setting as a private practice clinic, whereas 42.9% chose to further specify their practice setting beyond the options offered in the survey. Many of those participants clarified that they worked in academic practice settings, either in a hospital or clinic, which made sense given the physicians reached through the listservs.

Table 1: Demographic and Practice Characteristics of Participants

Demographic and Practice Characteristics	Percentage of Respondents (56)
<i>Gender</i>	
Female	60.7%
Male	39.3%
<i>Age</i>	
25 to 34	12.5%
35 to 44	25.0%
45 to 54	30.4%
55 to 64	23.3%
65 or older	8.9%
<i>Area of Practice</i>	
Internal Medicine	44.6%
Family Medicine	41.1%
Pediatrics	1.8%
Obstetrics/Gynecology	3.6%
Other	8.9%
<i>Years in Practice</i>	
0-10 years	23.6%
11-20 years	30.9%
21-30 years	25.5%
31-40 years	16.4%
Over 40 years	3.6%
<i>Patients per Week</i>	
0-20 patients per week	19.6%
21-40 patients per week	33.9%
41-60 patients per week	19.6%
61-80 patients per week	8.9%
81-100 patients per week	10.7%
Over 100 patients per week	7.1%
<i>Practice Setting</i>	
Private Practice Clinic	23.2%
Community Health Clinic	7.1%
Federally Qualified Health Center	7.1%
Urgent Care Center	0.0%
Emergency Room	0.0%
Hospital	19.6%
Other	42.9%

Physician Definition and Description of IPV

All physicians participating in the survey readily identified both physical violence and sexual violence as elements of IPV. The vast majority of respondents stated that psychological aggression constituted IPV (98.2%), and that stalking was included in the definition of IPV (87.5%). Several physicians also volunteered additional specific behaviors which they considered to be IPV, including isolation of victims, control of partner finances, and abuse of household pets. The above results are summarized in Table 2.

Physicians were asked if they considered IPV as a physical health problem, a mental health problem, or both a physical and mental health problem for their patients. Overwhelmingly, physicians responded that IPV is both a physical and mental health problem (89.3%), with 1.8% and 8.9% of physicians identifying IPV as a predominantly physical and predominantly mental health problem respectively. These results are presented in Table 2.

Lifetime Prevalence of IPV

Physicians were asked to estimate the prevalence of lifetime exposure to IPV for their female and male patients. Physicians responded with a wide range of estimates for lifetime rates of IPV in their female patients, with estimates ranging from 1% to 50% of female patients experiencing IPV over their lifetimes. The mean of the estimated lifetime exposure to IPV for female patients was 18.2% (from 48 useable responses to the survey item), with a median of 15%. Certain physicians' estimates of prevalence

included ranges of values (e.g. 10-30%), and so could not readily be included in the calculation of the mean, median, and mode of the dataset.

Table 2: Physicians' Definition and Description of IPV

IPV Definitions		Percentage of Respondents (56)
<i>IPV Elements</i>	Physical Violence	100%
	Sexual Violence	100%
	Stalking	87.5%
	Psychological Aggression (including coercive tactics)	98.2%
<i>Description of IPV</i>		
	Predominantly physical health problem	1.8%
	Predominantly mental health problem	8.9%
	Both physical and mental health problem	89.3%

When asked about lifetime exposure to IPV for their male patients, physicians also reported a wide range of estimates from 0% to 25%. The mean estimate lifetime exposure to IPV for male patients was 6.9%, with a median of 5%.

Approach to Screening Behaviors

Nearly 60% of physicians surveyed indicated that they were either “very comfortable” or “comfortable” with screening for IPV in their patients (see Table 3). Less than 9% of physicians reported that they were “uncomfortable” or “very uncomfortable

with screening”, and 32.1% of physicians said they were neither comfortable nor uncomfortable with screening their patients for IPV (Table 3).

Physicians were asked about their approach to screening for IPV in their female and male patients. A few physicians stated that they do not screen their female patients for IPV (Table 3). When asked about indicated screening, or screening which takes place when a physician is suspicious that IPV may be occurring, one-fourth of physicians indicated that they occasionally engage in such screening when their female patients present with symptoms such as bruises, trauma, or depression. Another 30.4% of physicians reported that they regularly perform indicated screening for IPV in their female patients. Routine screening, or screening that is performed regardless of patient presentation, was performed occasionally for female patients by 21.4% of physicians and regularly by 14.3% of physicians.

When physicians were asked about their IPV screening approaches for their male patients, they were much less likely to do so. One out of four physicians said that they do not screen for IPV in their male patients at all (Table 3). Two out of five physicians reported occasionally engaging in indicated screening of male patients while less than one out of five reported regularly engaging in indicated screening for IPV. Only 5.7% of respondents did routine screening occasionally for IPV in male patients, and 7.5% reported performing regular routine screening.

Physicians' Perceived Roles in Identifying, Evaluating, and Managing IPV

Physicians strongly believed that they have a role in screening for IPV in their patients, with over 85% of physicians either indicating that they “agree” or “strongly agree” with that statement (Table 4).

Physicians were asked about their role in providing information to their patients about IPV, both for identified victims of IPV and for all of their patients regardless of victim status. Only 10.7% of physicians did not agree that physicians should provide information about IPV to their patients regardless of victim status, and all physicians agreed that physicians should provide information about IPV to identified victims of IPV. The physicians were less likely to endorse broadly providing information about IPV to patients regardless of whether they were identified as a victim or not. Fifty-nine percent of physicians either “agreed” or “strongly agreed” that physicians should provide information to their patients about IPV regardless of whether or not they are identified as a victim of IPV. Over 95% of physicians agreed that physicians should provide such information to victims of IPV.

Physicians overwhelmingly agreed that they have a role in providing supportive counseling to victims of IPV (82.1%) and to make safety plans with victims of IPV (78.6%). Physicians were additionally asked about their perceived roles in referring victims to specialty counseling services, to follow up with victims of IPV, and to report IPV to law enforcement authorities. Almost all (98.1%) of physicians “agreed” or “strongly agreed” that they should be referring victims of IPV to specialty counseling services.

Table 3: Physicians' Comfort Level and Screening Practices for IPV in Female and Male Patients

Comfort Level and Screening Practices	Percentage of Respondents (56)
<i>Comfort Level with Screening</i>	
Very Comfortable	7.1%
Comfortable	51.8%
Neither Comfortable nor Uncomfortable	32.1%
Uncomfortable	7.1%
Very Uncomfortable	1.7%
<i>Screening of Female Patients</i>	
I do not screen for intimate partner violence.	8.9%
I occasionally screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)	25.0%
I regularly screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)	30.4%
I occasionally screen for intimate partner violence in my patients regardless of their presentation.	21.4%
I regularly screen for intimate partner violence in my patients regardless of their presentation.	14.3%
<i>Screening of Male Patients</i>	
I do not screen for intimate partner violence.	26.4%
I occasionally screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)	41.5%
I regularly screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)	18.9%
I occasionally screen for intimate partner violence in my patients regardless of their presentation.	5.7%
I regularly screen for intimate partner violence in my patients regardless of their presentation.	7.5%

Physicians were more ambivalent about their role in reporting IPV to law enforcement authorities. Only 37.5% of physicians either “agreed” or “strongly agreed” that physicians should report IPV to law enforcement, while 28.6% disagreed. These data are summarized in Figure 1.

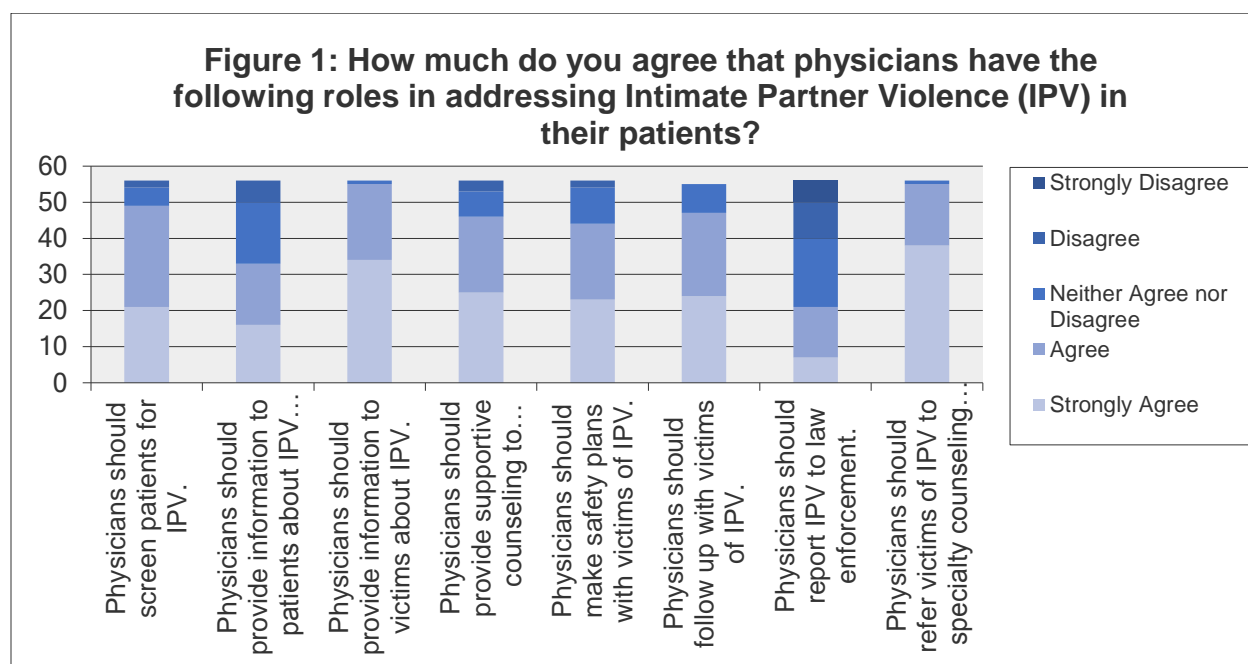
Table 4: Physicians’ Perceived Roles in Addressing IPV

Proposed Role	Physicians' Agreement With Proposed Role (56)				
	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
Physicians should screen patients for IPV.	0.0%	3.6%	8.9%	50.0%	37.5%
Physicians should provide information to patients about IPV regardless of victim status.	0.0%	10.7%	30.4%	30.4%	28.6%
Physicians should provide information to victims about IPV.	0.0%	0.0%	1.8%	37.5%	60.7%
Physicians should provide supportive counseling to victims of IPV.	0.0%	5.4%	12.5%	37.5%	44.6%
Physicians should make safety plans with victims of IPV.	0.0%	3.6%	17.9%	37.5%	41.1%
Physicians should follow up with victims of IPV.	0.0%	0.0%	14.3%	41.1%	42.9%
Physicians should report IPV to law enforcement.	10.7%	17.9%	33.9%	25.0%	12.5%
Physicians should refer victims of IPV to specialty counseling services.	0.0%	0.0%	1.8%	30.4%	67.9%

Training in Management of IPV

Half of physicians surveyed reported that they had formal training in how to address IPV in their patients (Table 5). Of the physicians who reported they had

received training, 52.9% had training with in-person lectures or didactic sessions, while 15.7% indicated that they had training in how to manage IPV via online



modules, and 13.7% had training with standardized patients or other applied training. When asked to rate the quality of their training, only one physician reported that his/her training had been “excellent.” One-third of physicians stated that their training had been either “very good” or “good.” More than one-in-three (35.6%) rated their training as only “fair” or “poor.”

Barriers to Identifying, Evaluating, and Managing IPV

Physicians were asked to indicate to what degree various factors limited their ability to address IPV in their patients. These results are summarized in Table 6 and Figure 2.

Lack of time in patient visits appeared to be an important factor in addressing IPV among primary care physicians, and was the most frequently identified barrier among physicians. More than one-quarter of physicians stated that lack of time during appointments to discuss IPV completely prevents them from addressing IPV in their patients, and another third reported that this barrier prevents them from addressing IPV by a large amount. Only 5.6% of physicians stated that lack of time at appointments does not prevent them from addressing IPV.

One-third of physicians stated that insufficient access to social services for IPV for their patients did not prevent them from addressing IPV. However, 42.6% said that this prevents them by at least a moderate amount, including 7.4% who stated that this factor completely prevents them from addressing IPV in their patients.

Physicians were also asked about patient-related factors which may contribute to their ability to address IPV. Patient reluctance to disclose exposure or discuss IPV constituted a greater barrier to addressing IPV; only 1.9% of physicians stated this completely prevents them from addressing IPV, 22.2% indicated that this prevents them from addressing IPV a large amount and an additional 20.4% a moderate amount. However, over a third (35.2%) of physicians surveyed indicated that patient reluctance to disclose IPV does not disrupt their ability to address IPV.

A small minority of physicians, 5.7%, reported that lack of privacy during visits completely prevents them from addressing IPV. Additionally, 13.2% indicated that this prevents them by a large amount. On the other hand, half of physicians said that lack of privacy during visits does not prevent them from addressing IPV in their patients at all.

Table 5: Physicians' Formal Training Experiences in IPV

Training Experiences in IPV		Percentage of Respondents (56)
<i>Had Training in IPV</i>		
Yes		50.0%
No		50.0%
<i>Type of Training Received</i>		
Online modules		15.7%
In-person lectures/didactic sessions		52.9%
Training with standardized patients or other applied training		13.7%
N/A		41.2%
<i>Quality of Training Received</i>		
Poor		8.9%
Fair		26.8%
Good		23.2%
Very Good		10.7%
Excellent		1.8%
N/A		28.6%

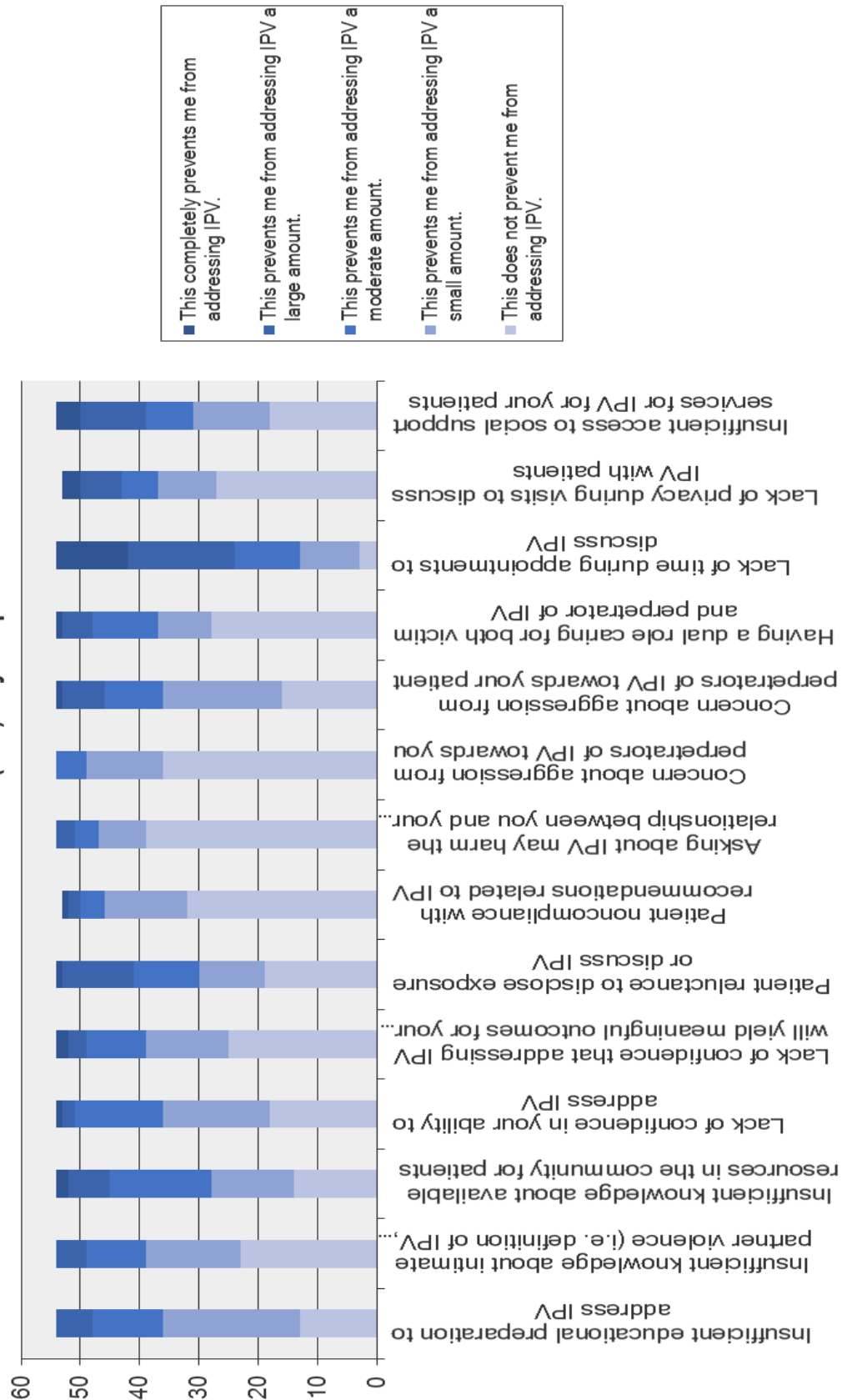
When asked if insufficient knowledge about available resources in the community for patients constituted a barrier to managing IPV, almost half indicated that this factor limited their ability to address IPV at least moderately.

Physicians were also asked about their concern regarding aggression from perpetrators of IPV towards their patients. Almost 15% of physicians reported that this completely prevents them from addressing IPV or does so by a large amount. Almost one-fourth (18.5%) of physicians stated that fear of perpetrator aggression toward their patients prevents them from addressing IPV by a moderate amount, with 37.0% indicating that it does so by a small amount. Nearly one-third (29.6%) of physicians

Table 6: Physicians' Perceived Barriers to Addressing IPV

Proposed Barrier	Physicians' Perceived Impact of Proposed Barriers (54)				
	This completely prevents me from addressing IPV.	This prevents me from addressing IPV a large amount.	This prevents me from addressing IPV a moderate amount.	This prevents me from addressing IPV a small amount.	This does not prevent me from addressing IPV.
Insufficient educational preparation to address IPV	0.0%	11.1%	22.2%	42.6%	24.1%
Insufficient knowledge about intimate partner violence (i.e. definition of IPV, types of IPV)	0.0%	9.3%	18.5%	29.6%	42.6%
Insufficient knowledge about available resources in the community for patients	3.7%	13.0%	31.5%	25.9%	25.9%
Lack of confidence in your ability to address IPV	1.9%	3.7%	27.8%	33.3%	33.3%
Lack of confidence that addressing IPV will yield meaningful outcomes for your patients	3.7%	5.6%	18.5%	25.9%	46.3%
Patient reluctance to disclose exposure or discuss IPV	1.9%	22.2%	20.4%	20.4%	35.2%
Patient noncompliance with recommendations related to IPV	1.9%	3.8%	7.5%	26.4%	60.4%
Asking about IPV may harm the relationship between you and your patient	0.0%	5.6%	7.4%	14.8%	72.2%
Concern about aggression from perpetrators of IPV towards you	0.0%	0.0%	9.3%	24.1%	66.7%
Concern about aggression from perpetrators of IPV towards your patient	1.9%	13.0%	18.5%	37.0%	29.6%
Having a dual role caring for both victim and perpetrator of IPV	1.9%	9.3%	20.4%	16.7%	51.9%
Lack of time during appointments to discuss IPV	22.2%	33.3%	20.4%	18.5%	5.6%
Lack of privacy during visits to discuss IPV with patients	5.7%	13.2%	11.3%	18.9%	50.9%
Insufficient access to social support services for IPV for your patients	7.4%	20.4%	14.8%	24.1%	33.3%

Figure 2: How much do the following factors prevent you from addressing Intimate Partner Violence (IPV) in your patients?



stated, however, that concern of perpetrator aggression toward their victim does not prevent them from addressing IPV in their patients.

The majority of physicians (51.9%) stated that the dual role of providing care for both victims and perpetrators of IPV does not prevent them from addressing IPV.

Slightly more than one out of ten physicians reported that having a dual role of caring for perpetrator and victim of IPV would prevent them from addressing IPV by a large amount or completely.

Physicians were asked whether or not insufficient educational preparation to address IPV was a factor which prevented them from addressing IPV in their patients. One-third of physicians indicated that lack of sufficient educational preparation prevented them from addressing IPV either by a large amount (11.6%) or a moderate amount (22.2%). A smaller number of respondents (27.8%) felt that insufficient knowledge about IPV (i.e., definition of IPV, types of IPV) prevented them from addressing IPV.

Most physicians were hindered not at all or only to a small extent by a lack of confidence that addressing IPV will yield meaningful outcomes for their patients completely prevents them from addressing IPV. One-fifth of physicians reported that this barrier prevents them from addressing IPV by small amounts and almost half indicated that this factor did not disrupt their ability to address IPV.

Most (60.4%) of physicians said that patient non-compliance with recommendations related to IPV would not prevent them from addressing IPV at all and another 26.4% felt it would to a small extent. Similarly, few physicians believed that asking about IPV might harm the relationship between them and their patient would

keep them from addressing IPV. Nearly three-quarters of physicians surveyed (72.2%) stated that this factor would not prevent them from addressing IPV, and 14.8% of physicians reported that this would prevent them by a small amount.

One-third of physicians reported that lack of confidence in their ability to address IPV was a factor that disrupted their ability to manage IPV in their patients by at least a moderate amount. One-third of physicians indicated that lack of confidence did not prevent them from addressing IPV in their patients at all.

Finally, fear of perpetrator aggression toward themselves concerned few respondents. Only 9.3% of physicians reported that fear of perpetrator aggression prevents them from addressing IPV a moderate amount, with 24.1% of physicians indicating that this prevents them by a small amount. Two-thirds stated that fear of perpetrator aggression does not prevent them from addressing IPV.

When physicians were asked if there were other barriers to addressing IPV in their patients, a few elaborated on perceived barriers. One physician summed up his/her experience with addressing IPV thusly:

Unless a patient comes to me with the problem, [I] usually do not have time to screen for this, as once found, [I am] not trained as to what to do next. Those who have had IPV usually have sought out other resources than my office, in that, I think they do not feel comfortable as I am the physician for the entire family, including, perhaps the perpetrator. They, perhaps, like to present their best face, or perceive, that perhaps I do not have the training to handle this. [It is an] interesting topic. Perhaps the reluctance is "opening a bag of worms" and not having or knowing the resources available to "positively" deal with it.

Another physician questioned his/her ability to address IPV in his/her patients adequately:

Although I have been trained to ask the questions, my rate of return is so low that I wonder if these questions are effective or if my delivery is wrong. I don't feel confident in my ability to 100% be able to help a patient in real time. For

instance, if my social worker is not here on that day - I'm not sure what my back-up plan is - particularly if the patient does not feel safe going home.

Another physician provided his/her opinion about the most effective arrangement for addressing IPV in the health care settings: "Physicians should screen; others should take the screen and referral and handle counseling, advocacy. Physicians don't have the time."

Summary and Discussion

Attitudes, Beliefs, and Practices Regarding Identifying/Evaluating IPV

The purpose of this study was to describe what primary care physicians' attitudes, beliefs, and practices are with regard to identifying, evaluating, and managing IPV in their patients. Identifying IPV is a multi-stage process which requires at a minimum an understanding of the fundamental nature of the problem. Comprehending the elements of IPV is a crucial step toward successfully identifying IPV. In keeping with CDC guidelines for defining IPV, all physicians responded that physical and sexual violence constitute IPV, and the vast majority of respondents agreed that psychological aggression and stalking were also elements of IPV. The physicians are familiar with the basic definition of IPV and should be in a position to at least recognize it in the course of taking clinical histories from their patients. Stalking was the least frequently identified element of IPV; this likely reflects that stalking has been recognized as a component of IPV more recently than has the other manifestations the survey asked about, and physicians are likely less familiar with the updated definition of IPV.

Physicians also overwhelmingly recognized that IPV is both a physical and mental health problem for patients, reflecting an appreciation that IPV, both in its causes and its effects, has the potential to have a powerful impact on victims' physical and mental health. Almost one-in-ten of surveyed physicians stated, however, that IPV is predominantly a mental health problem; perhaps reflecting the belief that underlying mental illness may predispose individuals to experiencing IPV, though there is no evidence to support this in the literature.

Half of the physicians surveyed reported that they had not received formal training in how to address IPV. Of those who did receive training, one-in-three stated their training was either “fair” or “poor”. This suggests a lack of effective training in IPV management.

While physicians do appear to readily identify what sorts of behavior constitute IPV, physicians’ estimates of prevalence rates of lifetime IPV reflect the fact that many may not fully appreciate the degree to which this problem affects their patients. Physicians estimated that their female patients have lifetime exposure of between 5-50%, with an average estimated lifetime prevalence of 18.2%. According to data from the CDC, 22.3% of women have been a victim of severe physical violence at the hands of an intimate partner over their lifetimes². Though CDC reports that over one in five women have experienced IPV over their lifetimes, other studies have indicated that the prevalence rate of IPV in the primary care setting may be closer to 15% for female patients²⁵. For male patients, surveyed physicians estimated that 0-25% had lifetime exposure to IPV, with an average estimated prevalence of 6.9% over their lifetimes. CDC data on lifetime prevalence of severe physical violence against men indicate that 14.0% experience violence committed by an intimate partner. These data suggest that the physicians surveyed are almost certainly underestimating rates of IPV in their male patients.

When asked about screening patients for IPV, the almost 60% of physicians reported that they were at least comfortable with screening, and almost a third more answered that they were neither comfortable nor uncomfortable with screening. This suggests that, while barriers certainly exist to prevent physicians from screening for IPV,

comfort level with screening does not constitute a significant barrier for this surveyed sample. Physicians were also asked to respond about their specific screening approaches for male and female patients. Only 14.3% of physicians reported performing routine screening regularly for their female patients. Recommendations for IPV screening in female patients are that physicians should perform routine rather than indicated screening and, presumably, regular routine rather than occasional routine screening for IPV²⁶⁻²⁷. These data suggest that most physicians are not performing IPV screening according to recommendations put forward by USPSTF and the IOM for screening female patients for IPV. There are no recommendations available for specifically screening male patients for IPV. In this study, 26.4% of physicians stated that they do not screen for IPV in their male patients at all, and 41.5% state that they only occasionally engage in indicated screening for IPV. Overall, these data indicate that physicians are not likely performing screening in a way as to optimally discover IPV in their patients.

While these data suggest that physicians are not likely adequately screening for IPV in their patients, nearly nine-in-ten physicians surveyed believe that physicians do have a role in screening their patients for IPV, and that they believe that IPV is a medical issue. Indeed, many do perform some degree of screening especially for their female patients.

Attitudes, Beliefs, and Practices Regarding Managing IPV

A majority of physicians endorsed a variety of roles for themselves in managing IPV. In this study, almost all felt that they should provide information to victims of IPV and more than half also agreed that they should provide information to patients regardless of whether or not they are identified as victims of IPV. These basic informational interventions are also viewed favorably by victims of IPV¹, and therefore represent a valuable point of consensus between doctor and patient regarding an appropriate intervention for managing IPV.

Most physicians also perceived that they have a role in providing supportive counseling for IPV, and that physicians should create safety plans with their patients who are victims of IPV. Responses to these two survey items suggest that physicians believe that they should be acting in a counseling role, providing support and safety planning interventions themselves. Physicians overwhelmingly agreed that they should follow up with victims of IPV after they were identified.

Physicians were divided by the proposed role of reporting IPV to law enforcement agencies. A study which sought to determine victims' perspectives on physicians' roles regarding IPV found that victims were divided on the issue of reporting to police, as well³⁰. On the other hand, physicians nearly unanimously agreed that referrals should be made to specialty counseling services for victims of IPV.

A number of barriers were identified which prevent physicians from adequately addressing IPV for their patients. Situational barriers were perceived to be the most significant disruptors by physicians, with lack of time during appointments to discuss

IPV most frequently identified. Lack of time during appointments was the most commonly identified barrier to addressing IPV for patients. Another situational barrier, the lack of privacy during visits to discuss IPV, was not identified as a significant barrier by most physicians, with over half (50.9%) stating that this does not prevent them from addressing IPV.

A resource-related barrier, insufficient access to social support services for IPV, was perceived in a mixed way by the sample. 20.4% perceived that this prevented them from addressing IPV by a large amount, while 7.4% stated that it completely prevents them from addressing IPV. One third (33.3%) indicate that this does not prevent them from addressing IPV at all. The variability in response to this particular factor likely reflects the varied demographic and socioeconomic situation of the patients treated by the surveyed physicians. Whereas insufficient access to social support may not be a significant barrier in affluent communities, patients from poorer communities (and the physicians who work there) may have trouble accessing sufficient social support systems.

Physician-related barriers, such as insufficient educational preparation to address IPV and insufficient knowledge about IPV were not strongly identified as barriers to addressing IPV. Additionally, physicians' lack of confidence in their ability to address IPV was not identified as a significant barrier, with 66.7% of physicians indicating that this prevented them from addressing IPV by a small amount or not at all. Insufficient knowledge of community resources was identified as a barrier slightly more frequently, with 3.7% of physicians stating that this completely prevents them from addressing IPV and 13.0% indicating that it prevents them by a large amount. Still,

25.9% indicate that this prevents them from addressing IPV by only a small amount and another 25.9% say that this does not prevent them from addressing IPV at all. This study demonstrated that, from physicians' perspectives, physician-related barriers are not perceived as significantly impacting their ability to address IPV.

Certain patient-related factors were perceived to be more significant barriers to addressing IPV. Patient reluctance to disclose IPV or discuss IPV was identified as preventing physicians from addressing IPV a large amount by 22.2% of physicians. Despite this, 55.6% of physicians perceived that this barrier prevented them from addressing IPV by a small amount or not at all. Other patient-related factors, such as lack of confidence that addressing IPV would yield meaningful outcomes for patients, or patient noncompliance with recommendations relating to IPV were not identified as significant barriers by this sample of physicians. Additionally, few physicians reported that potential harm to patient-doctor relationship constituted a significant barrier to addressing IPV.

Some physicians did report that they perceived the threat of aggression from perpetrators of IPV towards their patients as a barrier to addressing IPV, with 13.0% of physicians and 18.5% of physicians surveyed identifying this as preventing them by a large amount and a moderate amount respectively. Other perpetrator-related barriers, such as concern about aggression from perpetrators of IPV toward physicians and having a dual role caring for both victim and perpetrator of IPV were not frequently cited as significant barriers.

The accounts provided by physicians relating to their experiences working with IPV largely mirror physicians' accounts in the literature. Working with patients who experience IPV is frequently described as opening "Pandora's Box" or "a can of worms"^{25, 41}; physicians in this study provided similar metaphors for their own experiences.

Limitations

This study has several limitations which influence the interpretation of these results. Firstly, a sample of only 56 physicians completed the survey, and therefore these results may not be generalizable to the larger populations of physicians in Connecticut or the US. Because of the modest sample size, univariate descriptive statistics and frequencies were used to describe the data, though the nature of these descriptions do not allow for any quantifiable inferential interpretation of the data.

The sample was primarily recruited from a population of physicians working in and around a large academic medical center. This population of physicians and the patients whom they treat may not be representative of the general population of physicians/patients of the state or the nation, and therefore the results of this study should be interpreted cautiously.

The study was primarily designed to target primary care physicians, as these doctors are best positioned to identify, evaluate, and manage sensitive and complex issues such as IPV. The survey was distributed to primary care physicians and specialists with the intent that it would be completed by those who might realistically be

in a position to evaluate their patients for IPV. It is possible that the survey was completed by a few physicians who may not be in such a position. It is unlikely that a physician with no self-identified role in addressing IPV would have completed the survey.

IPV is a complex issue that transcends physical, mental, and psychosocial realms of health. There are a myriad of factors and barriers which are at play to influence how physicians and patients respond to it. A survey is reductionist by nature and may not allow respondents to completely describe their beliefs and attitudes accurately. This limitation and those previously mentioned suggest that a narrow interpretation of the above results may be most appropriate.

Summary

This study demonstrated that physicians are familiar with the basic elements of IPV and perceive IPV as both a mental and physical health problem. Physicians are screening their female and male patients for IPV, though this screening is not performed as often as is recommended and therefore it is likely that physicians are not detecting IPV that they would have otherwise discovered with more consistent screening. Physicians overwhelmingly believe that IPV is within their purview to address in the medical context and believe they have roles in screening patients for IPV, providing information to patients about IPV, providing counseling and making safety plans with patients, and following up/referring to specialty services. Physicians perceive significant barriers to addressing IPV, especially related to systems-level factors such as lack of

time during appointments to discuss IPV and insufficient access to community resources for patients. Some physicians also report that patient reluctance to disclose exposure or discuss IPV is a significant barrier to addressing IPV. There is certainly more research that needs to be done to continue to develop an understanding of IPV.

Conclusion

Future research in this field could seek to further define the features of some of the more significant barriers that physicians report when addressing IPV. A study focusing on the barrier of insufficient time to address IPV during patient visits, and determining more clearly the details of what that barrier means in practice, may help to develop solutions for how physician time might be optimized to better address IPV. Additionally, a study might examine how simple environmental prompts, such as posters or pamphlets, focused on IPV might impact voluntary disclosure of IPV by male and female patients. Informational interventions are well regarded by both physicians and victims of IPV, and so further investigating how these may be more effectively applied could provide insight as to how to more effectively address IPV in the clinical setting. There is clearly an opportunity for improved training of physicians to recognize and address IPV, with more hands-on and simulated training likely to produce more lasting results than lectures or online modules. Finally, strengthening networks between physicians' offices and community resources for assisting patients with IPV would be a crucial step in addressing access-related barriers. IPV is such a multifaceted issue; it will take a similarly multifaceted approach to address in a meaningful way.

Appendix I: Survey of Physicians on IPV

Demographic and Practice Characteristics

Thank you for taking the time to complete this voluntary survey. According to the Centers for Disease Control and Prevention (CDC), an "Intimate partner" is defined as follows: "An intimate partner is a person with whom one has a close personal relationship that may be characterized by the partners' emotional connectedness, regular contact, ongoing physical contact and sexual behavior, identity as a couple, and familiarity and knowledge about each other's lives. The relationship need not involve all of these dimensions." With that definition in mind, please complete the survey below.

1. What is your age?

- ☐ 25 to 34
- ☐ 35 to 44
- ☐ 45 to 54
- ☐ 55 to 64
- ☐ 65 or older

2. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Other

3. What is your area of practice?

- ☐ Internal Medicine
- ☐ Family Medicine
- ☐ Pediatrics
- ☐ Obstetrics/Gynecology
- ☐ Other

4. How many years have you been practicing in this field, including time in residency?

- ☐ 0-10 years
- ☐ 11-20 years
- ☐ 21-30 years
- ☐ 31-40 years
- ☐ Over 40 years

5. On average, how many patients do you care for per week?

- ☐ 0-20 patients per week
- ☐ 21-40 patients per week
- ☐ 41-60 patients per week
- ☐ 61-80 patients per week
- ☐ 81-100 patients per week
- ☐ Over 100 patients per week

6. How would you describe your primary practice setting?

- ☐ Private Practice Clinic
- ☐ Community Health Clinic
- ☐ Federally Qualified Health Center
- ☐ Urgent Care Center
- ☐ Emergency Room
- ☐ Hospital
- ☐ Other (please specify)

Attitudes Regarding Intimate Partner Violence

7. Which of the following do you believe are elements of Intimate Partner Violence (IPV)? Check all that apply.

- ☐ Physical violence
- ☐ Sexual violence
- ☐ Stalking
- ☐ Psychological aggression (including coercive tactics)
- ☐ None of the above

Other (please specify)

8. What percentage of your female patients would you estimate have ever experienced Intimate Partner Violence (IPV)?

9. What percentage of your male patients would you estimate have ever experienced Intimate Partner Violence (IPV)?

10. Do you view Intimate Partner Violence (IPV) as predominantly a physical health problem, mental health problem, or both for your patients?

- ☐ Predominantly a physical health problem
- ☐ Predominantly a mental health problem
- ☐ Both a physical and mental health problem

11. How comfortable do you feel with discussing Intimate Partner Violence (IPV) with your patients?

Very Uncomfortable	Uncomfortable	Neither Comfortable nor Uncomfortable	Comfortable	Very Comfortable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Which option best describes your approach to screening your female patients for Intimate Partner Violence (IPV)?

- ☐ I do not screen for intimate partner violence.
- ☐ I occasionally screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)
- ☐ I regularly screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)
- ☐ I occasionally screen for intimate partner violence in my patients regardless of their presentation.
- ☐ I regularly screen for intimate partner violence in my patients regardless of their presentation.

13. Which option best describes your approach to screening your male patients for Intimate Partner Violence (IPV)?

- ☐ I do not screen for intimate partner violence.
- ☐ I occasionally screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)
- ☐ I regularly screen for intimate partner violence when my patients present with symptoms which make me suspicious that they are being abused (e.g. bruises/trauma, depression, etc.)
- ☐ I occasionally screen for intimate partner violence in my patients regardless of their presentation.
- ☐ I regularly screen for intimate partner violence in my patients regardless of their presentation.

14. How much do you agree that physicians have the following roles in addressing Intimate Partner Violence (IPV) in their patients?

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Physicians should screen patients for IPV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physicians should provide information to patients about IPV regardless of victim status.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physicians should provide information to victims about IPV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physicians should provide supportive counseling to victims of IPV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physicians should make safety plans with victims of IPV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physicians should follow up with victims of IPV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physicians should report IPV to law enforcement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physicians should refer victims of IPV to specialty counseling services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Training

15. Have you had any formal training in how to address Intimate Partner Violence (IPV) in your patients?

☐ Yes

☐ No

16. Please indicate the type(s) of formal training you have had in how to address Intimate Partner Violence (IPV) in your patients. Check all that apply.

☐ Online modules

☐ In-person lectures/didactic sessions

☐ Training with standardized patients or other applied training

☐ N/A

Other (please specify)

17. How would you rate the adequacy of the training you have received?

Poor	Fair	Good	Very Good	Excellent	N/A
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Barriers

18. How much do the following factors prevent you from addressing Intimate Partner Violence (IPV) in your patients?

	This completely prevents me from addressing IPV.	This prevents me from addressing IPV a large amount.	This prevents me from addressing IPV a moderate amount.	This prevents me from addressing IPV a small amount.	This does not prevent me from addressing IPV.
Insufficient educational preparation to address IPV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insufficient knowledge about intimate partner violence (i.e. definition of IPV, types of IPV)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insufficient knowledge about available resources in the community for patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of confidence in your ability to address IPV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of confidence that addressing IPV will yield meaningful outcomes for your patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient reluctance to disclose exposure or discuss IPV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patient noncompliance with recommendations related to IPV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asking about IPV may harm the relationship between you and your patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern about aggression from perpetrators of IPV towards you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concern about aggression from perpetrators of IPV towards your patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	This completely prevents me from addressing IPV.	This prevents me from addressing IPV a large amount.	This prevents me from addressing IPV a moderate amount.	This prevents me from addressing IPV a small amount.	This does not prevent me from addressing IPV.
Having a dual role caring for both victim and perpetrator of IPV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of time during appointments to discuss IPV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of privacy during visits to discuss IPV with patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insufficient access to social support services for IPV for your patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Other than those listed above, are there other factors that you identify which disrupt your ability to address Intimate Partner Violence (IPV) in your patients?

Thank you very much for your participation in this study.

References

1. Chang, J. C., Decker, M. R., Moracco, K. E., Martin, S. L., Petersen, R., & Frasier, P. Y. (2005). Asking about intimate partner violence: advice from female survivors to health care providers. *Patient Education and Counseling*, 59(2), 141–147. <http://doi.org/10.1016/j.pec.2004.10.008>
2. Breiding MJ, Basile KC, Smith SG, Black MC, Mahendra RR. Intimate Partner Violence Surveillance: Uniform Definitions and Recommended Data Elements, Version 2.0. Atlanta (GA): National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2015.
3. Papadakaki, M., Prokopiadou, D., Petridou, E., Kogevinas, M., & Lionis, C. (2012). Defining physicians' readiness to screen and manage intimate partner violence in Greek primary care settings. *Evaluation & the Health Professions*, 35(2), 199–220. <http://doi.org/10.1177/0163278711423937>
4. Soglin, L. F., Bauchat, J., Soglin, D. F., & Martin, G. J. (2009). Detection of intimate partner violence in a general medicine practice. *Journal of Interpersonal Violence*, 24(2), 338–348. <http://doi.org/10.1177/0886260508316481>
5. McCall-Hosenfeld, J. S., Weisman, C. S., Perry, A. N., Hillemeier, M. M., & Chuang, C. H. (2014). "I Just Keep My Antennae Out": How Rural Primary Care Physicians Respond to Intimate Partner Violence. *Journal of Interpersonal Violence*, 29(14), 2670–2694. <http://doi.org/10.1177/0886260513517299>
6. Lo Fo Wong, S. H., De Jonge, A., Wester, F., Mol, S. S. L., Römken, R. R., & Lagro-Janssen, T. (2006). Discussing partner abuse: does doctor's gender really matter? *Family Practice*, 23(5), 578–586. <http://doi.org/10.1093/fampra/cml004>
7. Gutmanis, I., Beynon, C., Tutty, L., Wathen, C. N., & MacMillan, H. L. (2007). Factors influencing identification of and response to intimate partner violence: a survey of physicians and nurses. *BMC Public Health*, 7, 12. <http://doi.org/10.1186/1471-2458-7-12>
8. Riley, C. L., Sarani, B., Sullivan, J. A., Upperman, J. S., Kane-Gill, S. L., Bailey, H., & Society of Critical Care Medicine. (2015). Critical Violent Injury in the United States: A Review and Call to Action. *Critical Care Medicine*, 43(11), 2460–2467. <http://doi.org/10.1097/CCM.0000000000001255>
9. Waalen, J., Goodwin, M. M., Spitz, A. M., Petersen, R., & Saltzman, L. E. (2000). Screening for intimate partner violence by health care providers. Barriers and interventions. *American Journal of Preventive Medicine*, 19(4), 230–237.
10. Cluss, P. A., Chang, J. C., Hawker, L., Scholle, S. H., Dado, D., Buranosky, R., & Goldstrohm, S. (2006). The process of change for victims of intimate partner

violence: support for a psychosocial readiness model. *Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health*, 16(5), 262–274. <http://doi.org/10.1016/j.whi.2006.06.006>

11. Jonassen, J. A., & Mazor, K. M. (2003). Identification of physician and patient attributes that influence the likelihood of screening for intimate partner violence. *Academic Medicine: Journal of the Association of American Medical Colleges*, 78(10 Suppl), S20–23.
12. Jewkes, R. (2002). Intimate partner violence: causes and prevention. *Lancet* (London, England), 359(9315), 1423–1429. [http://doi.org/10.1016/S0140-6736\(02\)08357-5](http://doi.org/10.1016/S0140-6736(02)08357-5)
13. Garcia-Moreno, C., Jansen, H. A. F. M., Ellsberg, M., Heise, L., Watts, C. H., & WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team. (2006). Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *Lancet* (London, England), 368(9543), 1260–1269. [http://doi.org/10.1016/S0140-6736\(06\)69523-8](http://doi.org/10.1016/S0140-6736(06)69523-8)
14. Short, L. M., Johnson, D., & Osattin, A. (1998). Recommended components of health care provider training programs on intimate partner violence. *American Journal of Preventive Medicine*, 14(4), 283–288.
15. Campbell, J. C. (2002). Health consequences of intimate partner violence. *Lancet* (London, England), 359(9314), 1331–1336. [http://doi.org/10.1016/S0140-6736\(02\)08336-8](http://doi.org/10.1016/S0140-6736(02)08336-8)
16. Campbell, J. C., & Lewandowski, L. A. (1997). Mental and physical health effects of intimate partner violence on women and children. *The Psychiatric Clinics of North America*, 20(2), 353–374.
17. Jaffee, K. D., Epling, J. W., Grant, W., Ghandour, R. M., & Callendar, E. (2005). Physician-identified barriers to intimate partner violence screening. *Journal of Women's Health* (2002), 14(8), 713–720. <http://doi.org/10.1089/jwh.2005.14.713>
18. Bonomi, A. E., Thompson, R. S., Anderson, M., Reid, R. J., Carrell, D., Dimer, J. A., & Rivara, F. P. (2006). Intimate partner violence and women's physical, mental, and social functioning. *American Journal of Preventive Medicine*, 30(6), 458–466. <http://doi.org/10.1016/j.amepre.2006.01.015>
19. Liebschutz, J. M., & Rothman, E. F. (2012). Intimate-partner violence--what physicians can do. *The New England Journal of Medicine*, 367(22), 2071–2073. <http://doi.org/10.1056/NEJMp1204278>

20. Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Brandt, H. M., & Smith, P. H. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine*, 23(4), 260–268.
21. Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: a review of the literature. *Child Abuse & Neglect*, 32(8), 797–810. <http://doi.org/10.1016/j.chiabu.2008.02.004>
22. Gerber, M. R., Leiter, K. S., Hermann, R. C., & Bor, D. H. (2005). How and why community hospital clinicians document a positive screen for intimate partner violence: a cross-sectional study. *BMC Family Practice*, 6, 48. <http://doi.org/10.1186/1471-2296-6-48>
23. Brienza, R. S., Whitman, L., Ladouceur, L., & Green, M. L. (2005). Evaluation of a women's safe shelter experience to teach internal medicine residents about intimate partner violence. A randomized controlled trial. *Journal of General Internal Medicine*, 20(6), 536–540. <http://doi.org/10.1111/j.1525-1497.2005.0100.x>
24. Nyame S, Howard LM, Feder G, Trevillion K. (2013). A survey of mental health professionals' knowledge, attitudes and preparedness to respond to domestic violence. (n.d.). Retrieved January 28, 2016, from <http://www.medscape.com/medline/abstract/24279406>
25. Williston, C. J., & Lafreniere, K. D. (2013). "Holy cow, does that ever open up a can of worms": health care providers' experiences of inquiring about intimate partner violence. *Health Care for Women International*, 34(9), 814–831. <http://doi.org/10.1080/07399332.2013.794460>
26. Final Update Summary: Intimate Partner Violence and Abuse of Elderly and Vulnerable Adults: Screening. U.S. Preventive Services Task Force. July 2015. <http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/intimate-partner-violence-and-abuse-of-elderly-and-vulnerable-adults-screening>. Accessed 4/7/16.
27. Institute of Medicine of the National Academies. (2011). Clinical Preventive Services for Women Closing the Gaps (Report Brief). URL: http://www.nationalacademies.org/hmd/~media/Files/Report%20Files/2011/Clinical-Preventive-Services-for-Women-Closing-the-Gaps/preventiveservicesforwomenreportbrief_updated2.pdf. Accessed 4/7/16.
28. Cronholm, P. F., Fogarty, C. T., Ambuel, B., & Harrison, S. L. (2011). Intimate partner violence. *Am Fam Physician*. 2011;83(10):1165-1172. url: <http://www.aafp.org/afp/2011/0515/p1165.pdf>. Accessed 4/7/16.

29. Oluwatoni E Aluko, K. H. B. (2015). Medical Students' Beliefs About Screening for Intimate Partner Violence: A Qualitative Study. *Health Promotion Practice*, 16(4). <http://doi.org/10.1177/1524839915571183>
30. Chang, J. C., Cluss, P. A., Ranieri, L., Hawker, L., Buranosky, R., Dado, D., ... Scholle, S. H. (2005). Health care interventions for intimate partner violence: what women want. *Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health*, 15(1), 21–30. <http://doi.org/10.1016/j.whi.2004.08.007>
31. Short, L. M., Alpert, E., Harris, J. M., & Surprenant, Z. J. (2006). A tool for measuring physician readiness to manage intimate partner violence. *American Journal of Preventive Medicine*, 30(2), 173–180. <http://doi.org/10.1016/j.amepre.2005.10.009>
32. Salber, P. R., & McCaw, B. (2000). Barriers to screening for intimate partner violence: time to reframe the question. *American Journal of Preventive Medicine*, 19(4), 276–278.
33. Garimella, R. N., Plichta, S. B., Houseman, C., & Garzon, L. (2002). How physicians feel about assisting female victims of intimate-partner violence. *Academic Medicine: Journal of the Association of American Medical Colleges*, 77(12 Pt 1), 1262–1265.
34. Hamberger, L. K. (2007). Preparing the next generation of physicians: medical school and residency-based intimate partner violence curriculum and evaluation. *Trauma, Violence & Abuse*, 8(2), 214–225. <http://doi.org/10.1177/1524838007301163>
35. Dienemann, J., Glass, N., & Hyman, R. (2005). Survivor preferences for response to IPV disclosure. *Clinical Nursing Research*, 14(3), 215–233; discussion 234–237. <http://doi.org/10.1177/1054773805275287>
36. Lo Fo Wong, S., Wester, F., Mol, S., & Lagro-Janssen, T. (2007). "I am not frustrated anymore": Family doctors' evaluation of a comprehensive training on partner abuse. *Patient Education and Counseling*, 66(2), 129–137. <http://doi.org/10.1016/j.pec.2006.12.013>
37. Klevens, J., Sadowski, L., Kee, R., Trick, W., & Garcia, D. (2012). Comparison of screening and referral strategies for exposure to partner violence. *Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health*, 22(1), e45–52. <http://doi.org/10.1016/j.whi.2011.06.008>
38. Sprague, S., Kaloty, R., Madden, K., Dosanjh, S., Mathews, D. J., & Bhandari, M. (2013). Perceptions of intimate partner violence: a cross sectional survey of

- surgical residents and medical students. *Journal of Injury & Violence Research*, 5(1), 1–10. <http://doi.org/10.5249/jivr.v5i1.147>
39. McColgan, M. D., Cruz, M., McKee, J., Dempsey, S. H., Davis, M. B., Barry, P., Giardino, A. P. (2010). Results of a multifaceted Intimate Partner Violence training program for pediatric residents. *Child Abuse & Neglect*, 34(4), 275–283. <http://doi.org/10.1016/j.chiabu.2009.07.008>
 40. Gotlib Conn, L., Young, A., Rotstein, O. D., & Schemitsch, E. (2014). “I’ve never asked one question.” Understanding the barriers among orthopedic surgery residents to screening female patients for intimate partner violence. *Canadian Journal of Surgery. Journal Canadien De Chirurgie*, 57(6), 371–378.
 41. Zink, T., Regan, S., Goldenbar, L., Pabst S., & Rinto, B., (2004). Intimate partner violence: what are physicians’ perceptions? - PubMed - NCBI. (n.d.). Retrieved November 12, 2015, from <http://www.ncbi.nlm.nih.gov/pubmed/15355946>
 42. Beynon, C. E., Gutmanis, I. A., Tutty, L. M., Wathen, C. N., & MacMillan, H. L. (2012). Why physicians and nurses ask (or don’t) about partner violence: a qualitative analysis. *BMC Public Health*, 12, 473. <http://doi.org/10.1186/1471-2458-12-473>
 43. O’Campo, P., Kirst, M., Tsamis, C., Chambers, C., & Ahmad, F. (2011). Implementing successful intimate partner violence screening programs in health care settings: evidence generated from a realist-informed systematic review. *Social Science & Medicine* (1982), 72(6), 855–866. <http://doi.org/10.1016/j.socscimed.2010.12.019>
 44. McNutt, L. A., Carlson, B. E., Rose, I. M., & Robinson, D. A. (2002). Partner violence intervention in the busy primary care environment. *American Journal of Preventive Medicine*, 22(2), 84–91.
 45. U.S. Department of Justice, Office of Justice Programs. (2000). Extent, Nature, and Consequences of Intimate Partner Violence (Report No. NCJ 181867). Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/181867.pdf>.